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Title : PRICE DISCOVERY ANALYSIS IN CRUDE PALM OIL FUTURES MARKET IN MALAYSIA

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The escalation in vegetable oils prices is a major concern to most of the developing countries as they are a major source of fat in the developing world. Like any other agricultural commodities, Malaysian palm oil is subjected to significant price fluctuations. Due to its position as the main world producer of palm oil and the essential needs for futures market for this commodity, Bursa Malaysia's Crude Palm Oil Futures contract or, better known as FCPO was introduced in October 1980. It is often believed that futures markets potentially provide an important function of price discovery whereby the futures prices movements should contain useful information about the movement of subsequent spot prices. However, there are some evidences of doubts and skepticism on the role of commodity futures in providing its crucial role of price discovery to its stakeholders (Iyer and Pillai, 2010; Soni, 2014). Hence, the investigation of efficiency of FCPO for price discovery tool is important for a better understanding of the futures market role to manage risk associated with high price fluctuation in CPO prices. For that reason, the present work aims to analyse the characteristics of relationship between spot and futures prices of crude palm oil in Malaysian market to examine the efficiency of FCPO contracts to perform price discovery function through co-integration test, causality relationship analysis and price forecasting. The data of the study comprises of daily settlement prices of CPO spot and nearby FCPO prices collected from the Malaysian Palm Oil Board (MPOB) and the Bursa Malaysia Derivative Berhad (BMD), respectively. The long run market efficiency is tested using Engle-Granger and Johansen co-integration procedure while the causality relationship investigated using vector error correction (VEC) and vector auto-regression (VAR) model. For price forecasting, the study compares the performance of auto-regressive integrated moving average (ARIMA) and artificial neural networks (ANN) model to forecast the selected CPO futures contracts prices. Findings from the current study argue that only the one month futures contract is efficient for hedging purposes but the contract should be exercised ten days before the maturity date of the contracts for better hedging benefits. Meanwhile, the causality relationship analysis has revealed that CPO futures contract is not efficient for price discovery purposes since the long run relationship between the two markets are strong from spot to futures market. The results of the study also suggested that technical traders and overall market participants in BMD should use the ANN model to forecast the upcoming prices in FCPO contracts. Findings from the current work should make an important contribution to field of CPO industry as it offers important insights into the efficiency of CPO futures market for price discovery and hedging instrument.